DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011034 Address: 333 Burma Road **Date Inspected:** 09-Nov-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Deck Panel**

Summary of Items Observed:

On this day Caltrans OSM Quality Assurance (QA) Inspector Daniel Barrentine was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

QA Inspector performed Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled "Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld" after ZPMC welding personnel performed weld repairs of tacked areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panels examined are as follows:

DP350-002- 1 tack weld location found compliant and 1 tack weld locations found non-compliant.

DP134-002- 1 tack weld location found compliant and 0 tack weld locations found non-compliant.

DP3007A-001- 35 tack weld locations found compliant and 0 tack weld location found non-compliant.

DP3046-001- 8 tack weld locations found compliant and 0 tack weld location found non-compliant.

DP3031-001- 4 tack weld location found compliant and 0 tack weld locations found non-compliant.

DP3062-001- 22 tack weld locations found compliant and 8 tack weld locations found non-compliant.

Tack weld locations found non-compliant are marked on U-Rib and Deck Plate for ZPMC's reference for repair.

See Caltrans U-rib to Deck Panel- Tack Weld Assessment sheets dated 9th November, 2009 for further information on PAUT inspections.

WELDING INSPECTION REPORT

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On this date QA Inspector Daniel Barrentine performed in-process inspections on the repair/welding of U-Rib to Deck Panel welds in the OBG trial assembly yard, in accordance with WPS-B-T-2233-TC-U4b-F.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

| Inspected By: | Barrentine, Daniel | Quality Assurance Inspector |
|---------------|--------------------|-----------------------------|
| Reviewed By: | Carreon, Albert | QA Reviewer |